

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

1. (currently amended) A method for starting an internal combustion engine with at least a valve that may be held in a position~~deactivated~~, the method comprising:
 ~~processing a signal indicative of a request to start said engine;~~
 closing at least an exhaust valve of at least a cylinder in said engine in response to ~~said a request to start said engine~~signal; and
 ~~opening~~maintaining said exhaust valve ~~in said closed position until~~ after a combustion event in said at least a cylinder; and
 varying the number or pattern of operating valves in at least a cylinder of said engine after said combustion event.
2. (currently amended) The method of Claim 1 wherein said exhaust valve is a valve that may be mechanically~~deactivated~~ held in position.
3. (currently amended) The method of Claim 1 wherein said exhaust valve is an ~~electrically~~mechanically actuated valve.
4. (original) The method of Claim 1 wherein said exhaust valve is closed before said engine begins to rotate and maintained closed until after a combustion event in said cylinder occurs, and then the valve is opened.

5. (currently amended) The method of Claim 1 wherein an operator activating a switch generates said request~~signal~~.
6. (currently amended) The method of Claim 1 wherein said request~~signal~~ is made by a signal generated remotely from a vehicle.
7. (currently amended) The method of Claim 1 wherein all exhaust valves are maintained closed until after a respective combustion event for said respective exhaust valve.
8. (currently amended) A method for starting an internal combustion engine at least a valve that may be ~~deactivated~~held in a position, the method comprising:
 - ~~processing a signal indicative of a request to start said engine;~~
 - closing at least an exhaust valve in at least a cylinder of said engine in response to a~~said~~ signal~~request~~ to start said engine;
 - determining engine position in response to said signal~~request~~;
 - injecting fuel ~~into~~ said cylinder based on said determined engine position;
 - combusting said injected fuel in said cylinder;
 - and
 - maintaining said exhaust valve closed until after combustion of said injected fuel in said cylinder;
 - and
 - varying the number or pattern of operating valves in at least a cylinder of said engine, during a cycle of said cylinder, after said combustion event.

9. (currently amended) The method of Claim 8 wherein said exhaust valve is a valve that may be mechanically-~~deactivated~~ held in position.
10. (currently amended) The method of Claim 8 wherein said exhaust valve is an electrically~~mechanically~~ actuated valve.
11. (currently amended) The method of Claim 8 wherein an operator activating a switch generates said ~~signal~~ request.
12. (currently amended) The method of Claim 8 wherein said ~~signal~~ request is signal generated remotely from a vehicle.
13. (original) The method of Claim 8 wherein said injected fuel produces a lean air-fuel mixture in said cylinder.
14. (original) The method of Claim 8 wherein said injected fuel produces a rich air-fuel mixture in said cylinder.
15. (original) The method of Claim 8 wherein said injected fuel produces a stoichiometric air-fuel mixture in said cylinder.
16. (currently amended) A method for starting an internal combustion engine with electromechanically actuated valves, the method comprising:
 - ~~processing a signal indicative of a request to start said engine;~~
 - closing at least an exhaust valve of said engine in response to asaid ~~signal~~ request to start said engine;
 - opening at least an intake valve of said engine in response to said request;

rotating engine in response to said request;
closing said at least one intake valve;
~~determining engine position in response to said~~
~~signal;~~
~~adjusting at least an intake valve timing for~~
~~at least a cylinder of said engine based on said~~
~~determined engine position;~~
injecting fuel into said at least a cylinder of
said engine;
combusting said fuel in said at least a
cylinder of said engine; and
operating said at least an exhaust valve in
said at least a cylinder after said combustion in said at
least a cylinder.

17. (cancelled) The method of Claim 16 wherein said adjusting at least an intake adjustment for at least a cylinder of said engine opens said at least an intake valve until an intake stroke in said at least a cylinder.
18. (original) The method of Claim 16 wherein said injected fuel produces a lean air-fuel mixture in said at least a cylinder.
19. (original) The method of Claim 16 wherein said injected fuel produces a rich air-fuel mixture in said at least a cylinder.
20. (original) The method of Claim 16 wherein said injected fuel produces a stoichiometric air-fuel mixture in said at least a cylinder.

21. (currently amended) A method for starting an internal combustion engine with electromechanically actuated valves, the method comprising:
- ~~processing a signal indicative of a request to start said engine;~~
 - closing at least an intake valve of at least a cylinder in said engine in response to a request to start said engine ~~signal;~~
 - opening at least an exhaust valve of said at least a cylinder in said engine in response to said ~~signal~~ request;
 - ~~determining engine position in response to said signal;~~
 - closing said at least an exhaust valve in said at least a cylinder before a first air induction event in said at least a cylinder;
 - injecting fuel ~~into~~ said at least a cylinder;
 - opening said at least an intake valve in said at least a cylinder, inducting an desired ~~air~~ amount ~~based on said injected fuel;~~
 - combusting said injected fuel in said at least a cylinder; and
 - opening said at least an exhaust valve in said at least a cylinder after said combustion in said at least a cylinder.
22. (original) The method of Claim 21 wherein said injected fuel produces a lean air-fuel mixture in said at least a cylinder.
23. (original) The method of Claim 21 wherein said injected fuel produces a rich air-fuel mixture in said at least a cylinder.

24. (original) The method of Claim 21 wherein said injected fuel produces a stoichiometric air-fuel mixture in said at least a cylinder.
25. (currently amended) A computer readable storage medium having stored data representing instructions executable by a computer to control an internal combustion engine of a vehicle, said storage medium comprising:
- ~~instructions for processing a signal indicative of a request to start said engine,~~
 - instructions for closing at least an exhaust valve of at least a cylinder in said engine in response to a request to start said engine, and maintaining said exhaust valve closed during rotation of said engine until after a combustion event in said cylinder, in response to said signal; and
 - instructions for varying the number or pattern of operating valves in at least a cylinder of said engine after said combustion event.~~and~~
 - ~~instructions for opening said at least an exhaust valve from said closed position after a combustion event in said cylinder.~~
26. (new) The method of Claim 2 wherein said electrically actuated valve is an electromechanical valve.
27. (new) The method of Claim 10 wherein said electrically actuated valve is an electromechanical valve.
28. (new) A method for starting an internal combustion engine with at least a valve that may be held in a position, the method comprising:
- maintaining a mechanically actuated exhaust valve in a closed position in at least a cylinder of said

engine, during at least a portion of an exhaust stroke of said at least a cylinder, prior to a first combustion event; and
opening said mechanically actuated exhaust valve after a first combustion event in said at least a cylinder.

29. (new) The method of Claim 1 wherein said varying the number or pattern of operating valves, operates said engine in a multi-stroke cylinder mode.
30. (new) The method of Claim 1 wherein said varying the number or pattern of operating valves, operates said engine in a cylinder deactivation mode.
31. (new) The method of Claim 1 wherein said varying the number or pattern of operating valves, changes cylinder charge motion.